

## Evaluating Physical Activities of Disabled Young People: Expectations & Challenges

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**Abstract:** After rehabilitation or treatment in hospitals, young people with disabilities often could not engage in a variety of sports due to their physical limitations related to their illness or disability. This gives rise to certain psychological problems, reduced self-esteem and self-confident. The aim of the ReSport project is to enable young people with disabilities to participate equally in sports activities, considering their health condition. Professionals from 8 project partners' countries aim to recognize the problems that are preventing young people with disabilities from participating in sports after rehabilitation. Partners collected local, regional, national and Europe wide best practices and concepts in the field of innovative approaches for motivation of youth with disabilities for sports, and developed a set of exercises to raise their inclusion in sport activities. The project "Re-Sport" encourages social inclusion and equal opportunities in sport, while the parallel topics are to promote voluntary activity in sport and education in and through sports with special focus on skills development. Two main target groups will benefit from the project results: a) youth with disabilities and b) volunteers from sports organisations. The purpose of this study is to learn and evaluate which physical activities youth with disabilities prefer, their expectations, challenges and good practices. This research was conducted with young people with disabilities in Slovenia, Austria, Italy, Croatia, Serbia, Sweden, Greece, and Turkey. Total number of participants were 230. Analysis and graphics were prepared with a special software based on the survey's answers. According to the answers received, investigations, inferences were made and reported.

**Keywords:** Young people, Sport activity, Challenges, Expectations, Social inclusion

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### Introduction

After rehabilitation or treatment in hospitals, young people with disabilities often could not engage in a variety of sports due to their physical limitations related to their illness or disability. This gives rise to certain psychological problems, reduced self-esteem and self-confident. The aim of the project is to enable young people with disabilities to participate equally in sports activities, considering their health condition. Professionals from 8 project partners' countries aim to recognize the problems that are preventing young people

with disabilities from participating in sports after rehabilitation. Partners collected local, regional, national and Europe wide best practices and concepts in the field of innovative approaches for motivation of youth with disabilities for sports, and developed a set of exercises to raise their inclusion in sport activities.

The project "Re-Sport" encourages social inclusion and equal opportunities in sport, while the parallel topics are to promote voluntary activity in sport and education in and through sports with special focus on skills development. Two main target groups will benefit from the project results: a) youth with disabilities and b) volunteers from sports organisations. Creating an on-line learning portal for blended learning will enable execution of two kinds of workshops with the purpose to raise awareness about the importance of sport for health and prevention of injuries during execution of sports exercises for youths with disabilities. Particular attention will be given to the pursuit of outdoor sport activities in nature, using existing outdoor facilities, due to the free accessibility and the importance of being physically active outdoor.

The project "Re-Sport" can be easily replicated, enlarged, and multiplied; in the sense that it can become a model for providing a multicultural partnership, suitable for building better European conditions that promote physical activities for youth with disabilities in different European countries. As one of the first stages of the project, the consortium created a survey to learn and evaluate which physical activities youth with disabilities prefer, their expectations, challenges and good practices.

### **Goals of the ReSport Project**

The goals of the ReSport project listed as below:

- On-line pre-event and post-event survey among young persons with disabilities.
- Guide of Best Practices in the field of motivating young persons with disabilities for doing sports.
- Manual of various types of disabilities and disability management.
- E-learning portal for education and learning material, including developed exercises for youths with disabilities.
- Sport programme Re-Sport with optimal set of outdoor sports and exercises for youths with disabilities after rehabilitation/treatment.
- Workshop training of the innovative programme "Re-Sport Volunteers".
- Workshop training of the innovative programme "Re-Sport Youths".
- Multiplier sport events to demonstrate the developed of the sport programme "Re-Sport" including youth with disabilities.

### **Sport Participation of Youths with Disabilities**

Regular physical activity is a cornerstone of maintaining a healthy lifestyle. Engaging in continuous physical activity triggers health-enhancing processes, promoting muscle training and endurance. These positive effects extend to cardiovascular health and body composition, reducing the risk of cardiovascular diseases. Moreover, for individuals with disabilities, participating in sports and physical activities can significantly improve their

ability to carry out daily living activities, enhancing their overall quality of life (WHO, 2022). Over the past decade, there has been a decline in physical activity levels among people (Swanson, Colwell & Zha0, 2008). Office jobs necessitate employees to spend their day sitting at a desk, and post-work hours, many individuals prefer watching television or engaging in various forms of social media. This lack of physical activity may lead to adverse health consequences, including an increased risk of cardiovascular diseases, obesity, and type 2 diabetes mellitus (Dlugonski, Joyce & Motl, 2012). Individuals with physical disabilities tend to participate in sports at a lower rate compared to those without physical disabilities.

Sports participation offers similar benefits to individuals with physical disabilities as it does to those without such disabilities. Apart from the health-related advantages, like reducing the risk of heart disease, obesity, and type 2 diabetes (Tenenbaum & Eklund, 2007; Ellis et al. 2007), active people with physical disabilities also reported experiencing improved balance and psychosocial benefits, such as enjoyment, social interactions, acceptance of their disability, and enhanced self-confidence (Rimmer et al. 2004).

## Method

The survey is part of the Erasmus+ funded project Re-Sport, that is developed to encourage social inclusion and equal opportunities in sport, and that aims to promote voluntary activity in sports and education. As one of the first stages of the project, a survey was prepared to learn and evaluate which physical activities disabled young people prefer, their expectations, challenges, observations and sharing of best practices.

Intended data:

Disabled youth:

- Current activity status and satisfaction levels,
- Activities they want to participate in,
- Difficulties they face in participating in activities,
- The effect of environmental and individual factors on their activities,
- Expectations for a better physical life.

This research was conducted with young people with disabilities in Slovenia, Austria, Italy, Croatia, Serbia, Sweden, Greece, and Turkey. Each partner received support from relevant organizations and educational institutions in their own country, through which young people with disabilities were reached. The questionnaire, developed by the project consortium, was prepared in English on a Google Forms digital platform, and translated into local language by each partner. With the prepared questionnaire forms, social media announcements, link sharing, young people who met the criteria were asked to fill out the questionnaire.

In addition, the survey links were sent to the managers of the relevant institutions and organizations by e-mail, and they were asked to share with the members, volunteers, and students. The survey was administered online. The answers given to the forms were automatically taken to the servers. With the completion of the survey

process, the answers in all different languages were duplicated and the open-ended answers were coded and duplicated. Analysis and graphics were prepared with a special software based on the survey's answers. According to the answers received, investigations, inferences were made and reported.

## Results

### Demographic Features

It was observed that the gender ratios of the participants showed relative similarity according to the gender ratio of the country and world population distribution. This shows the importance of results in terms of representation. The gender distribution of the 230 disadvantaged young people who filled out the questionnaire was observed as 51% for Male, 48% for Female, and 1% for Not Preferring Answering.

There are significant differences between the age groups of disadvantaged youth who participated in the survey. Accordingly, 57% of the participants were aged 20 and under, 29.25% were in the 21-23 age group, and 13,61% were in the 24-26 age group.

### Life and Activity

Most of the participants stated that their disability is physical with a rate of 44.35%. This research, which included young people with neurological (22.61%), sensory (17.83%) and mental (15.22%) disabilities, respectively, revealed that young people do not isolate themselves from social life despite their disabilities, and they desire to socialize.

The fact that the participants were physically disabled at a high rate also revealed the importance of going into the details of the obstacles to the participation of disabled individuals in physical activities. When the participants were asked whether they wanted to participate in physical or sportive activities, almost all of them showed a positive attitude with a rate of 91.30%. When asked how often they participate in physical activities, it was observed that they were similarly active. The research also revealed that the rate of young people with disabilities participating in any sportive/physical activity at least once a week is as high as 71% .When the participants were asked how often they wanted to be physically active, it was understood that they wanted to be more active than they are now. It was observed that the rate of 71% who were in intense activity on weekdays increased to 86%, while the rate of 26% who did not participate in any sportive / physical activity decreased to 12%.When the participants were asked whether they were satisfied with their current physical activity level, 46.52% Yes, 53.48% No. It has been observed that dissatisfied individuals are in physical disability groups with 45% and in other disability groups with 55%.When the activities preferred by the participants were examined, it was concluded that 40.87% were group activities and 59.13% were individual activities.

Individuals with physical disabilities are in the first place in the preference of both activities, in the second

place; It was observed that those who preferred individual activities were neurologically disabled with 26.03%, and those who preferred group activities were individuals with sensory disabilities with 21.28%. When the sports and physical activities they want to participate in are examined, the first 5 places are: Swimming 23.55%, Athletics 13.04%, Football 10.87%, Cycling 9.06%, Table Tennis 7.97%. Bowling, which was answered in the other option, was preferred at the same level as Handball among the multiple-choice answers.

Considering the most preferred sports and physical activities; It is seen that individual, group and individual activities come to the fore. Participants gave the answer that their access to sports and physical activities is generally satisfactory (58.70%), 29.57% average and 11.74% bad. When the distribution of those who gave the bad answer is examined; It has been observed that there are individuals with 36% Physical, 24% Mental, 20% Sensory, and 20% Neurological disabilities. When asked to evaluate the variety of equipment offered to them, the participants replied that they were satisfied with 49.57%, found the average at a rate of 34.35%, and found it bad at a rate of 16.09%. When the distribution of those who gave the bad answer is examined; It has been observed that there are individuals with Physical disabilities with a rate of 46% and with Mental, Sensory and Neurological disabilities with equal rates of 18%. When the participants were asked how suitable the existing equipment was for their needs, 59.57% answered that it was satisfactory, 27.83% average, and 12.61% answered that it was not suitable for the needs. When the distribution of those who gave the answer "Not Appropriate" was examined; It was observed that there were individuals with 54% Physical, 18% Neurological, 14% Mental and Sensory disabilities.

It was observed that 83.91% of the participants, who were asked how much their parents supported them about their participation in sports and physical activities, answered that their families were supportive. 10.43% answered as average and 5.65% answered that they could not find enough support. When the distribution of those who gave information that their families did not support enough; It has been observed that there are individuals with Physical, Sensory and Neurological disabilities with a rate of 31% and individuals with a Mental disability with a rate of 7%.

Those who are quite satisfied with the support of their families; 50% Physical, They are 22% Neurological, 15% Sensory and 13% Mental disabilities. It was observed that 53.48% of the participants, who were asked whether they were supported by their schools regarding their participation in sports and physical activities, answered that their school was supportive. 28.26% answered as average, and 18.26% answered that they could not find enough support. When the distribution of those who gave information that their schools did not support them enough was examined; It was observed that individuals with Physical, Mental 28%, Neurological 20% and Sensory disabilities gave the answer 7% with a rate of 45%. Those who are very satisfied with the support of their schools; 45% Physical, 26% Neurological, 18% Sensory and 11% Mental disabilities.

It was observed that 66.96% of the participants, who were asked whether they were supported by their peers regarding their participation in sports and physical activities, answered that their peers were supportive. 25.22% answered as average, 7.83% answered that they could not find enough support. When the distribution of those

who gave information that their peers did not support enough; It was observed that 36% responded with Physical, Mental and Neurological 23%, and individuals with sensory disabilities gave the answer 18%. Those who are quite satisfied with the support of their peers; They are individuals with 45% Physical, 21% Neurological, 20% Sensory and 14% Mental disabilities. When asked to evaluate the Physical Factors (Transportation, Facility, Material, etc.) and Social Factors (Family, School, Peer, etc.) of the participants participating in this research, it was observed that their satisfaction levels were high. While this rate is in the first place with "Conformity to Need" with 60% in physical factors, it has been observed that the average satisfaction with physical factors is 56%.

Similarly, it has been concluded that while the support of families stands out with 84% in social factors, the average satisfaction rate in social factors is 68%. On the other hand, while the equipment variety is evaluated as bad in physical factors, the number of individuals who claim that the school's support is low in social factors is relatively higher than the others. The difficulties encountered by the participants while participating in sports activities; Environmental Factors by 42%, Individual Factors by 58%. When the sub-theme is examined, Physical Factors with 36%, Psychological Factors with 24%, Economic Factors with 19%, Disability Status with 15% and Social Factors with 6%. When the environmental and individual factors are analyzed on the basis of countries; It has been observed that the intensity range of environmental factors is 36%. This can be interpreted as the relatively low number of people with disabilities who do sports or participate in physical activity, so the probability of the society to meet people with disabilities engaged in physical activity is low. Among the difficulties of the participants: Transportation, High Costs, Lack of Activity and Pain of Injury take the first place. In addition to the benefits that sportive activities improve health, help prevent musculoskeletal problems that may develop due to inactivity, support independent living, increase self-esteem, reduce stress it is among the benefits that cannot be ignored that it provides socialization and gains new skills. The fact that the participants evaluate these benefits in parallel can be considered as the expected benefit from the survey and research. When the answers are examined; Health benefits ranked first with 32.83%. while the benefits for socialization took the second place with 24.92%, the benefits for mental health were observed as 20.67%, and the acquisition of new skills was observed as 11.55%. Thanks to the competitions, it has been observed that the benefits that can be added to each item above are mentioned at a rate of 10.03%. When the participants were asked whether they were in contact with people with disabilities or special needs like themselves, they answered Yes at a rate of 75.22% and No at a rate of 24.78%. It was observed that those who answered yes were 44% Physical, 21% Neurological, 19% Sensory, and 16% Mental disabled individuals. When the participants were asked whether they participated in activities with disabled individuals, 53.04% answered Yes, 46.96% answered No. It was observed that those who answered yes were 50% Physical, 19% Neurological, 16% Mental, and 15% Sensory disabled individuals. When the participants were asked which activities they participated in together; In the open-ended question, which also includes answers such as outdoor activities such as Traveling and Walking as well as volunteering activities, group trainings, and workshops, among the sports activities Swimming 22.41%, Athletics 12.97%, Table tennis 10.34%, Basketball-Walking-Football 7.76%, Gymnastics 6.90%.

## Conclusions

Today, with many regulations regarding people with disabilities, it has been relatively easier for them to be intertwined with social life compared to the past (Alhassan& Osei, 2022; Al-shummarani, & Nasr, 2022; Alzahrani, & Flynn-Wilson, 2021; Hamadneh & Almogbel 2023; Ostry, Wolfe, & Wertalik, 2023; Nkomo, Dube, & Marucchi, 2020; Rodrigues, 2023; Utomo, & Syarifah, 2021). Arrangements such as the employment of people with disabilities, the fact that there are better opportunities to use many more places with environmental regulations, and more people with disabilities can go out with better regulations in public transportation vehicles are at a better level compared to the past, but of course they are not sufficient.

Another situation that is getting better in terms of disabled people is the initiatives to increase the participation of disabled people in physical activity. The benefits of physical activity are well known. These benefits apply not only to healthy individuals, but also to individuals with disabilities. Situations such as the sponsorship of many companies so that disabled people can be involved in sports / physical activity, municipalities opening sports clubs and centres with an increasing rate, universities developing and implementing physical activity programs for disabled individuals, the possibility of federations to reach children studying in schools for disabled people increase the participation of disabled people in physical activity.

The importance of physical activity, whose health benefits are so well known, is more important for disabled people than for healthy individuals. For this reason, it should be the duty of many individuals and institutions to ensure that many more disabled people meet and continue with physical activity.

According to the obtained results of the need analysis, we recommend the project steering committee to identify already existing solutions for easily accessible ways to be more physically active and select the best practice from each partner country at IO2 and it looks better to select them from swimming, athletics, football, cycling and table tennis.

In the light of the results obtained in this study, knowing the situations that prevent disabled individuals from participating in physical activity, removing them from obstacles and thus ensuring the participation of more disabled individuals in physical activity should be one of the ultimate goals. According to this research, people with disabilities have fears according to the geography they live in, their disability and especially when environmental factors are considered. In addition, initiatives for the participation of disabled people in collective physical activity should be seen among important goals.

According to the results of this research, municipalities have responsibilities especially in transportation, facilities and materials and urban planning. In addition to the state, private institutions should assume roles in directing disabled people to physical activity with the facilities they will establish, the organizations they will organize and sponsorships.



## Recommendations

As a result of the need analysis, we recommend developing a manual of various types of disabilities and disability management as a unique pedagogical resource to describe various types of disabilities (physical, mental), disability management and injury prevention with instructions about what we must take care according to disability and sport activation. It is clear that it will raise awareness about health concerns and prevention of injuries during the sport exercise performing. It can be an important resource for training workshops for volunteers and sport trainers in the project, as well as for parents, teachers, mentors of disabled young people and wide public awareness of the severity of the disability and knowledge of it in the exercise of physical and sports activities.

It looks also good decision to prepare the set of physical activities and short exercises with guidelines for youths with disabilities, which they could performed after rehabilitation/treatment in hospital. In the light of the need analysis, it is important to educate volunteers about on the proper implementation of selected exercises for young people with disabilities after rehabilitation. We recommend the project partners to check defined good practices to find and select a best motivation strategy to motivate children with special needs to be more physically active.

In addition, media, educational institutions, public institutions should play an active role in raising the awareness of the whole society, especially the families of the disabled, about physical activity for the disabled. To reach the goals and objectives of the project, the project partner organisation should develop an easy navigate, attractive and accessible open education resource such as e-learning portal for education and learning material, including video and guidelines for developed exercises for youths with disabilities. This e-learning portal can be accessible for wider audience such as parents, mentors, teachers, volunteers, youth workers, coaches, and sport trainers.

As an intensive pedagogical resource in the project, it will be important to develop an innovative programme “Re-Sport Volunteers” for volunteers, coaches and trainers from different local sport organisations, associations, and clubs. By this method, they will be trained in performing the outdoor sport program “Re-Sport” for youth with disabilities in Austria, Croatia, Greece, Italy, Serbia, Slovenia, Sweden, and Turkey.

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## References

- Alhassan, B. & Osei, M (2022). Effectiveness of Integrating Drawing in Teaching English Language in Intellectual Disability Classroom. *International Journal on Social and Education Sciences (IJonSES)*, 4(1), 74-86. <https://doi.org/10.46328/ijonSES.250>
- Al-shummarani, L. A. & Nasr, A. T. A. (2022). Attitudes of Learning Disabilities Teachers towards Use of Augmented Reality Technology. *International Journal of Studies in Education and Science (IJSES)*, 3(2), 119-131.
- Alzahrani, S. S., & Flynn-Wilson, L. (2021). Cultural Influences on Early Intervention Services. *International Journal on Studies in Education (IJonSE)*, 3(1), 1-9.
- Ellis R, Kosma M, Cardinal BJ, Bauer JJ, McCubbin JA. (2007). Physical activity beliefs and behaviour of adults with physical disabilities. *Disabil Rehabil*;29(15):1221-7.
- Dlugonski D, Joyce RJ, Motl RW. (2012). Meanings, motivations, and strategies for engaging in physical activity among women with multiple sclerosis. *Disabil Rehabil*. 34(25):2148-57.
- Hamadneh B. M. & Almogbel W. N. (2023). The Level of Well-being of 6-12 Year Old Children with Disabilities from the Point of View of Parents. *International Journal of Education in Mathematics, Science, and Technology (IJEMST)*, 11(1), 252-266. <https://doi.org/10.46328/ijemst.3015>
- Nkomo, N., Dube, A., & Marucchi, D. (2020). Rural Young Children with Disabilities: Education, Challenges, and Opportunities. *International Journal on Studies in Education (IJonSE)*, 2(2), 134-145.
- Ostry, C., Wolfe, P. S., & Wertalik, J. L. (2023). Implementation of Functional Behavior Assessments for Individuals with Developmental Disabilities Exhibiting Sexually Inappropriate Behaviors. *International Journal on Social and Education Sciences (IJonSES)*, 5(3), 435-451. <https://doi.org/10.46328/ijonSES.559>
- Rimmer JH, Riley B, Wang E, Rauworth A, Jurkowski J. (2004). Physical activity participation among persons with disabilities: Barriers and facilitators. *Am J Prev Med*.26(5):419-25.
- Rodrigues, I. S. (2023). IoT as Assistive Technology: Applications in Education as a Tool for Inclusion. *International Journal of Technology in Education (IJTE)*, 6(1), 100-112. <https://doi.org/10.46328/ijte.357>
- Swanson SR, Colwell T, Zhao Y. (2008). Motives for participation and importance of social support for athletes with physical disabilities. *J Clin Sport Psychol*. 2(4):317-36.
- Tenenbaum G, Eklund R.C. (2007). *Exercise adherence*. In: *Handbook of sport psychology*. Third ed. Hoboken, New Jersey: John Wiley & Sons, Inc. 515-8.
- Utomo, D. P., & Syarifah, D. L. (2021). Examining Mathematical Representation to Solve Problems in Trends in Mathematics and Science Study: Voices from Indonesian Secondary School Students. *International Journal of Education in Mathematics, Science, and Technology (IJEMST)*, 9(3), 540-556.
- WHO. (2003). *Health and development through physical activity and sport* [Internet]. Geneva, Switzerland. Retrieved from <http://apps.who.int/iris/bitstream/10665/67796/1/>